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FEB 26 1965

CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE.
and
STATE ENGINEER of UTAH

In cooperation with U.S. Forest Service, Bureau of Reclamation,
Utah Fish and Game Dept., Utah Agricultural Experiment Station,
U.S. National Park Service, U.S. Geological Survey; and other
Federal, State, and private organizations.

AS OF
FEB. 1, 1965

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Soil Conservation Service, 511 N.W. Broadway - Room 507, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES _____	MONTHLY (FEB.-MAY) _____	PORTLAND, OREGON _____	ALL COOPERATORS
BASIC DATA SUMMARY _____	OCTOBER 1 _____	PORTLAND, OREGON _____	ALL COOPERATORS
STATES			
ALASKA _____	MONTHLY (MAR.-MAY) _____	PALMER, ALASKA _____	ALASKA S.C.D.
ARIZONA _____	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA _____	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO _____	MONTHLY (FEB.-MAY) _____	FORT COLLINS, COLORADO _____	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO _____	MONTHLY (JAN.-JUNE) _____	BOISE, IDAHO _____	IDAHO STATE RECLAMATION ENGINEER
MONTANA _____	MONTHLY (JAN.-JUNE) _____	BOZEMAN, MONTANA _____	MONT. AGR. EXP. STATION
NEVADA _____	MONTHLY (JAN.-MAY) _____	RENO, NEVADA _____	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON _____	MONTHLY (JAN.-JUNE) _____	PORTLAND, OREGON _____	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH _____	MONTHLY (JAN.-JUNE) _____	SALT LAKE CITY, UTAH _____	UTAH STATE ENGINEER
WASHINGTON _____	MONTHLY (FEB.-JUNE) _____	SPOKANE, WASHINGTON _____	WN. STATE DEPT. OF CONSERVATION
WYOMING _____	MONTHLY (FEB.-JUNE) _____	CASPER, WYOMING _____	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA _____	MONTHLY (FEB.-JUNE) _____	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA _____	MONTHLY (FEB.-MAY) _____	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

FEBRUARY 1, 1965

Report prepared by
GREGORY L. PEARSON - GARRY DINSDALE
and
Patricia Paramore

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
FEDERAL BLDG., ROOM 4012
SALT LAKE CITY UTAH 84111

Issued by

WAYNE D. CRIDDLE
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SALT LAKE CITY, UTAH

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SOIL CONSERVATION SERVICE
SALT LAKE CITY, UTAH

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UTAH AGRICULTURAL
EXPERIMENT STATION
LOGAN, UTAH

PROSPECTIVE WATER SUPPLIES

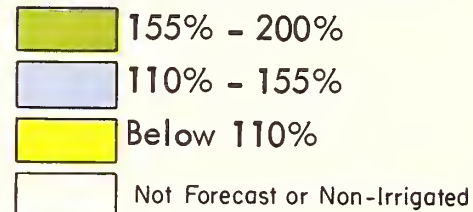
Based on Snow Surveys Made on
UTAH and BEAR RIVER WATERSHEDS

February 1, 1965

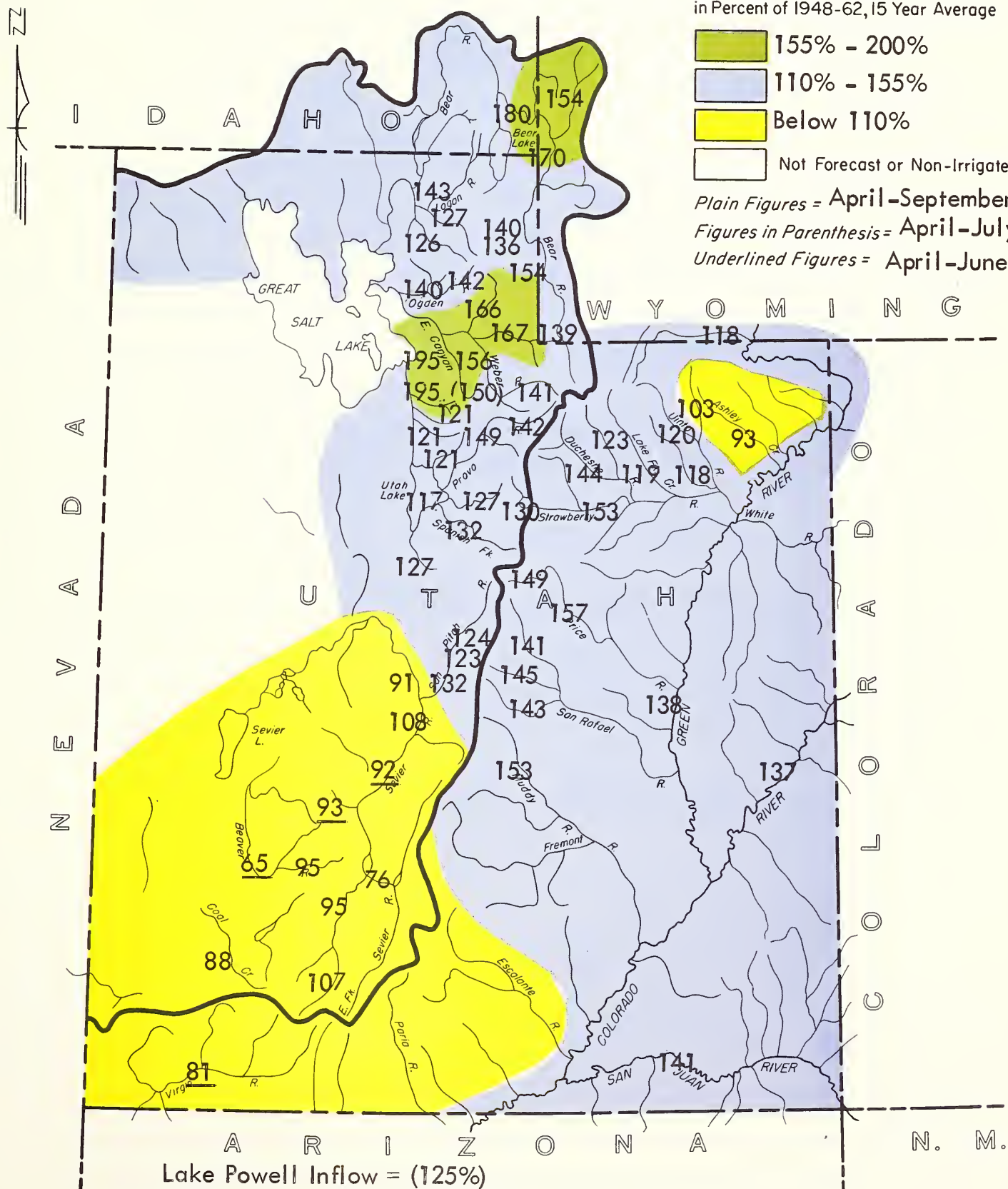
Approximate Date



FORECAST STREAM FLOW
in Percent of 1948-62, 15 Year Average



Plain Figures = April-September
Figures in Parenthesis = April-July
Underlined Figures = April-June



Lake Powell Inflow = (125%)

Flaming Gorge Inflow = (146%)

WATER SUPPLY OUTLOOK

as of

FEBRUARY 5, 1965

* The current water outlook is fair in the southwest, *
* good to excellent for the rest of the State. Three *
* fourths of average to average streamflow is expect- *
* ed in the southwest, while forecasts for most other *
* streams lie between 120% and 150%. Higher eleva- *
* tion snow courses along the Wasatch Front from near *
* Salt Lake and the head of the Provo river and then *
* northward into Idaho and Wyoming have a record to *
* near record snowpack. *

Except for an area along the Wasatch Front from about Ogden northward into Idaho and extending eastward to the headwaters of the Weber and Provo rivers, January storms left less than average snowpack accumulations for the month. In the northern area, however, snowfall for the month generally varied from about 130% to near 200% of usual amounts.

The net effect of last month's storms on water supply prospects for next summer still leaves a fair outlook for the upper Sevier, Virgin and Beaver rivers and adjacent smaller streams. Here most streamflow forecasts range between about 75% to average amounts. The outlook is good to excellent for all streams from Loa to Salina and northward into Idaho and Wyoming. Forecasts for these streams vary from about 120% to 195% of average.

In the Uinta Basin, January snowfall was particularly light in the mountains from Moon Lake eastward to the Flaming Gorge reservoir area. Here the monthly snowpack accumulation varied from about 15% to 50% of average. In the western and southern parts of the Basin on the Duchesne and Strawberry rivers, snowfall was heavier, ranging from 70% to about average. This was also true for streams from the Richfield area northward to the southern tributaries to Utah Lake.

Snowfall for the month on the Upper Sevier, Virgin and Beaver rivers was 35% to 80% of average.

Highest forecasts in the state, in relation to average, are for Parley's Creek near Salt Lake and East Canyon Creek near Morgan. Both of these are forecast at 195%.

Streams having forecasts between 150% and 170% of average include the Bear river at Woodruff and Randolph, Lost Creek near Croydon, Chalk Creek at Coalville, Weber river near Coalville, Strawberry at Duchesne, Price river near Heiner and Muddy Creek near Emery.

WATER SUPPLY OUTLOOK (continued)

Inflow to Utah Lake is forecast at 117%. Streams from Ashley Creek near Vernal to Lakefork river below Moon Lake have forecasts ranging from 93% to 120%. Except as noted above, forecasts for all other streams in central and northern Utah lie between 120% and 150% of average. This includes the tributaries of the San Pitch and San Rafael rivers and extends southward across Salina Creek, the headwaters of the Fremont river and Otter Creek north of Koosharem.

If snowfall during February and March is average, there are several areas where the April 1st snowpack will approach or exceed previous records. Several examples are as follows: At Trial Lake (Elev. 9800 Ft.) on the headwaters of the Provo river, average snowfall would make the April 1st reading equal 39.9 inches of water. This compares with the maximum reading of 39.3 inches recorded in 1952. The average April 1st snow water is 28.0 inches. The Silver Lake snow course at Brighton near Salt Lake with an expected reading of 37.9 inches of water will be just under the 1952 record of 38.2 inches. A similar snowpack condition exists at the high elevation courses on the Logan and Ogden rivers. The lower elevation snow cover is generally less, however, due to the warm weather and rains experienced this winter. For example, the Ben Lomond Peak snow course (Elev. 8,000 ft.) on the Ogden river has 152% of average for February 1 while the Ben Lomond lower snow course (Elev. 5850 ft.) is 111%.

Since there is still another 40 to 45% of the average season's snowpack yet to come during February and March, a considerable change may yet take place in the water supply picture for next summer. However, in the areas of highest stream-flow prospects, it is not too early to begin taking precautionary measures for handling the runoff during the high snowmelt period, so that any damage that might occur will be held to a minimum.

UTAH STREAMFLOW FORECASTS ^a (1,000 Ac. Ft.)

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE ^b	THIS YEAR AS PERCENT OF AVERAGE
GREAT BASIN					
<u>BEAR RIVER SYSTEM</u>					
Bear nr Ut-Wyo. State Line	160	Apr-Sept	123	115	139
Bear nr Woodruff	180	Apr-Sept	148	117	154
Woodruff Crk nr Woodruff, Utah	24	Apr-Sept	15.8	17.6*	136
Big Crk nr Randolph, Ut.	12	Apr-Sept	3.9	8.6*	140
Bear nr Randolph	160	Apr-Sept	107	94	170
Smith's Fork nr Border, Wyo.	173	Apr-Sept	123	112	154
Bear at Harer, Idaho	465	Apr-Sept	289	258	180
Little Bear nr Paradise (2)	53	Apr-Sept	42	42	126
Logan nr Logan (3)	190	Apr-Sept	123	133	143
Blacksmith Fork nr Hyrum (4)	80	Apr-Sept	49	63	127
<u>WEBER-OGDEN RIVERS</u>					
Weber nr Oakley	140	Apr-June	105	100	140
	173	Apr-Sept	124	123	141
Wanship Reservoir Inflow (5)	175	Apr-July	---	117*	150
Weber nr Coalville (6)	200	Apr-Sept	- -	128	156
Chalk Crk at Coalville	60	Apr-Sept	- -	36	167
Lost Crk nr Croydon, Ut.	30	Apr-Sept	- -	18.1	166
East Canyon Crk nr Morgan (7)	50	Apr-Sept	- -	25.6	195
So Fork Ogden nr Huntsville	88	Apr-Sept	- -	62	142
Pineview Reservoir Inflow (8)	180	Mar-July	115	129	140
<u>PROVO RIVER & UTAH LAKE</u>					
Strawberry Reservoir Inflow(9)	65	Apr-Sept	- -	50	130
Spanish Fork at Thistle	53	Apr-Sept	- -	40	132
Payson Creek nr Payson	9.3	Apr-Sept	- -	7.3*	127
Hobble Crk nr Springville	27	Apr-Sept	- -	21.2	127
Provo nr Hailstone (10)	155	Apr-Sept	- -	109 *	142
Provo at Vivian Park (11)	215	Apr-Sept	- -	144	149
American Fork nr American Fork	40	Apr-Sept	33	33	121
Utah Lake Inflow	330	Apr-Sept	- -	282	117
<u>JORDAN RIVER & SALT LAKE</u>					
Little Cottonwood Crk nr SLC	46	Apr-Sept	41	38	121
Big Cottonwood nr SLC	47	Apr-Sept	43	39	121
Parley's Crk nr SLC	26	Apr-Sept	16.2	13.3	195

(1) Measured flow plus change in storage in Woodruff Narrows Reservoir. (2) Measured flow plus change in storage in Porcupine Reservoir. (3) Includes U.P. & L. Co. tailrace and Logan, Hyde Park & Smithfield Canal. (4) Above Utah Power & Light Company's dam. (5) Observed flow Weber River near Wanship, Utah, plus change in storage in Wanship Reservoir, plus diversion by Weber-Provo Canal. (6) Includes diversion by Weber-Provo Canal and change in storage in Wanship Reservoir. (7) Observed flow plus change in storage in East Canyon Reservoir. (8) Inflow record as computed by U.S. Bureau of Reclamation. (9) Change in storage plus diversion thru Strawberry tunnel. (10) Observed flow minus diversions thru Duchesne tunnel and Weber-Provo Canal. (11) Observed flow plus change in storage in Deer Creek reservoir, minus diversions thru Duchesne tunnel & Weber-Provo Canal, plus diversion thru Salt Lake Aqueduct.

UTAH STREAMFLOW FORECASTS ^a (1,000 Ac. Ft.)

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE ^b	THIS YEAR AS PERCENT OF AVERAGE
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SEVIER RIVER

Sevier at Hatch	33	Apr-June	25.4	32	103
	48	Apr-Sept	35	45	107
Sevier nr Circleville	38	Apr-Sept	24.1	40*	95
Sevier nr Kingston	19	Apr-June	10.5	21.0	90
	23	Apr-Sept	11.9	25.5	94
East Fork Sevier nr Kingston(12)	11	Apr-June	- -	15.8	70
	15	Apr-Sept	- -	19.8	76
Sevier below Piute Dam(13)	39	Apr-Sept	- -	45	87
Clear Crk nr Sevier(abv.Div.)	12	Apr-June	- -	12.9*	93
Inflow					
Kingston to Vermillion Dam	36	Apr-June	- -	39	92
Vermillion Dam to Gunnison	64	Mar-June	- -	59	108
Salina Crk at Salina(14)	15	Apr-June	- -	8.3*	181
Sevier nr Gunnison	50	Apr-Sept	32	55	91

SAN PITCH RIVER

Pleasant Crk nr Mt. Pleasant	12	Apr-Sept	- -	9.7*	124
Twin Crk nr Mt. Pleasant	5.8	Apr-Sept	- -	4.7*	123
Ephraim Creek nr Ephraim	20	Apr-Sept	- -	15.2	132

BEAVER RIVER

Beaver nr Beaver	17.5	Apr-June	14.4	18.0	97
	23	Apr-Sept	20.5	24.3	95
Rockyford Reservoir Inflow(15)	5	Apr-June	- -	7.7	65

COAL CREEK

Coal Crk nr Cedar City	14	Apr-Sept	- -	16.0	88
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COLORADO RIVER BASIN

GREEN RIVER TRIBUTARIES IN UTAH

FLAMING GORGE TO DUCHESNE RIVER

Henry's Fork at Linwood	40	Apr-Sept	- -	34	118
Ashley Creek nr Vernal	52	Apr-Sept	- -	56	93

(12) Observed flow plus change in storage in Otter Creek Reservoir. (13) Observed flow plus change in storage in Otter Crk & Piute Reservoirs. (14) Gage is below diversion's near Salina. (15) Observed flow at Rockyford Dam, corrected for change in storage in Rockyford Reservoir. (16) Observed flow plus diversion through Duchesne Tunnel.

UTAH STREAMFLOW FORECASTS ^a (1,000 Ac. Ft.)

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE ^b	THIS YEAR AS PERCENT OF AVERAGE
<u>DUCHESNE RIVER</u>					
Duchesne at Provo River (Trail nr Hanna)	55	Apr-Sept	- -	35*	157
Duchesne nr Tabiona (16)	164	Apr-Sept	- -	114	144
Rock Crk nr Mtn. Home	125	Apr-Sept	- -	102	123
Strawberry at Duchesne	110	Apr-Sept	- -	72	153
Lakefork below Moon Lake(17)	86	Apr-Sept	- -	72	119
Yellowstone nr Altonah	86	Apr-Sept	- -	73	118
Uinta nr Neola	114	Apr-Sept	- -	95	120
Whiterocks nr Whiterocks	65	Apr-Sept	- -	63	103
<u>PRICE RIVER</u>					
Gooseberry Crk nr Scofield	15	Apr-Sept	- -	11.9	126
Scofield Reservoir Inflow(18)	55	Apr-Sept	- -	37	149
Price nr Heiner (18)	107	Apr-Sept	- -	68	157
<u>SAN RAFAEL RIVER</u>					
Huntington Crk nr Huntington	79	Apr-Sept	- -	56	141
Cottonwood Crk nr Orangeville	80	Apr-Sept	- -	55	145
Ferron Crk nr Ferron	60	Apr-Sept	- -	42	143
<u>MUDDY RIVER</u>					
Muddy Creek nr Emery	35	Apr-Sept	- -	22.8*	153
<u>VIRGIN RIVER</u>					
Virgin at Virgin	35	Apr-June	37	43	81
<u>UPPER COLORADO BASIN</u>					
Colorado nr Cisco, Utah	5200	Apr-Sept	2525	3789	137
Flaming Gorge Inflow(19)	1650	Apr-July	1180	1129	146
Green at Green River, Utah(19)	4650	Apr-Sept	2875	3368	138
San Juan nr Bluff, Utah(20)	1650	Apr-Sept	644	1172	141
Lake Powell Inflow(8)	9600	Apr-July	5483	7692	125

(17) Observed flow plus change in storage in Moon Lake Reservoir. (18) Observed flow plus change in storage in Scofield Reservoir. (19) Observed flow plus change in storage in Flaming Gorge and Big Sandy Reservoirs. (20) Observed flow plus change in storage in Navajo Reservoir. (21) Observed flow at Lee's Ferry plus change in storage in Flaming Gorge, Navajo, Lake Powell and Big Sandy.

GENERAL FOOTNOTES

(a) Runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. The discharge data is taken from preliminary records of the U.S. Geological Survey. (b) 1948-62, 15 year period. *Partly estimated.

RESERVOIR STORAGE (1,000 Ac. Ft.)

BASIN or STREAM	RESERVOIR	USABLE CAPACITY	MEASURED (FIRST OF MONTH)		
			THIS YEAR	LAST YEAR	AVERAGE ^a
GREAT BASIN					
<u>Bear River</u>	Bear Lake	1421.0	905.7	709.3	883.7
	Woodruff Narrows	26.5	17.2	12.9	- -
<u>Little Bear</u>	Hyrum	15.3	6.7	13.4	10.1
	Porcupine	11.3	2.2	- -	- -
<u>Ogden</u>	Pineview	110.0	71.4	53.6	8.9
<u>Weber</u>	Rockport	59.1	42.4	25.9	15.1*
	Echo	73.9	50.7	34.7	26.8
	East Canyon	28.7	0.0	18.9	12.4
	Willard Bay	215.0	52.0	- -	- -
<u>Provo</u>	Deer Creek	149.7	118.3	99.0	91.4
<u>Spanish Fork</u>	Strawberry	270.0	61.5	53.1	133.0
<u>Utah Lake</u>	Utah Lake (b)	1149.0	403.0	261.9	542.6
<u>Sevier River</u>	Otter Creek	52.5	15.1	13.4	23.3
	Piute	74.0	24.8	18.3	31.7
	Sevier Bridge	236.0	41.3	36.6	92.2
<u>Beaver River</u>	Rocky Ford	23.3	6.9	5.9	10.7
COLORADO RIVER DRAINAGE					
<u>Ashley Creek</u>	Steinaker	33.3	14.1	13.1	- -
<u>Lake Fork</u>	Moon Lake	35.8	10.0	19.0	13.0
<u>Price River</u>	Scofield	65.8	13.0	10.0	18.5
<u>Green</u>	Flaming Gorge	3789.0 d	968.7	893.2	- -
<u>San Juan</u>	Navajo	1709.0 d	329.8	332.0	- -
<u>Colorado</u>	Lake Powell	27000.0 d	6197.0	3113.0	- -

* - Average for 1957-62 inclusive.

All data contained in this table supplied by the U.S. Geological Survey.

(a) 1948-62 average. (b) Active capacity taken at 3.1 feet above compromise point. (c) Partly estimated.

(d) Total capacity reported.

COMPARISON of SNOW COVER

RIVER BASIN or TRIBUTARY WATERSHED	NO. of COURSES AVERAGE	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	AVERAGE *

GREAT BASIN

Smith's Fork-Bear River(Wyo)	4	183	202
Mink Creek - Cub River	3	168	166
Logan River	3	176	150
Blacksmith Fork	6	154	134
Malad River(Idaho)	2	140	182
Ogden River	5	160	138
Weber River above Echo Dam	8	248	172
Chalk Creek - Coalville	2	220	178
East Canyon Creek	3	218	171
Farmington Creek	-	- -	- -
Salt Lake Area	4	218	172
Tooele Area	1	137	134
American Fork River	2	201	133
Provo River above Vivian Park	7	255	163
Strawberry Reservoir Valley	3	263	138
Spanish Fork River	4	212	154
Mt. Nebo Area	2	175	140
Sevier River above Panguitch	3	258	108
East Fork Sevier River	4	178	73
Salina Creek	2	178	166
San Pitch River	4	221	146
Veaver River	3	302	119
Coal Creek-Cedar City	3	188	100

COLORADO RIVER BASIN

Duchesne-Strawberry Rivers	5	337	164
Lakefork River	3	336	160
Whiterocks-Uintah Rivers	3	348	124
Price River	5	362	158
San Rafael Tributaries	6	418	191
Escalante River	2	133	70
Virgin River	4	240	103

* Actual or Estimated 1948-62, 15 year Average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

GREAT BASIN DRAINAGE

UPPER BEAR RIVER
(Above Harer, Idaho)

Big Park	10G11	8700	2/3	73	25.0	12.6	10.3*
CCC Camp x	10G7	7500	1/28	49	13.4	8.0	7.8
Monte Cristo R.S.	11H12	8960	2/4	72	25.0	11.5	16.0*
Piney LaBarge x	10G10	8820	2/1	86	28.5	13.8	12.4*
Salt River Summit x	10G8	7900	1/28	60	16.6	10.3	10.2*
Trial Lake x	10J8	9800	1/29	92	28.4	10.4	16.5*

LOWER BEAR RIVER
(Below Harer, Idaho)

Beaver Crk-Skunk Crk. x	11H14	7150	1/29	45	10.8	6.2	8.0*
Christensen Ranch	11G11	5600	2/3	24	7.5	5.9	6.4*
Cub River R.S.	11G12	5400	2/2	21	6.6	6.6	6.5*
Dry Basin A	11G13	7900	Delayed Report			16.0	- -
Dry Bread Pond x	11H13	8230	1/29	60	15.7	8.7	11.3*
Dry Creek Flat	12G4	6350	1/28	31	8.0	5.7	4.7*
Emigrant Summit	11G6	7700	2/2	81	29.4	13.5	- -
Garden City Summit	11H7	7600	1/27	57	17.0	10.6	12.5*
Horseshoe Basin A	11G14	8000	Delayed Report			14.0	- -
Klondike Narrows	11H1	7400	1/28	77	22.3	11.2	13.5*
Liberty Spring	11G15	8420	Delayed Report			19.4	- -
Monte Cristo R.S.	11H12	8960	2/4	72	25.0	11.5	16.0*
Oxford Mountain	12G3	6800	1/28	46	12.0	- -	6.2*
Steep Hollow #1	11H27	8500	2/2	117	42.4	19.3	23.0*
Steep Hollow #2	11H28	7700	2/2	93	34.0	15.1	17.5*
Strawberry Creek	11G9	5800	2/3	35	11.2	7.3	7.7*
Strawberry Mink Divide	11G10	6800	2/3	65	24.4	12.0	13.5*
Tony Grove R.S.	11H3	6250	2/2	38	12.4	7.4	8.4
Willow Flat	11G4	6100	2/2	42	15.4	10.4	9.7*

OGDEN RIVER

Beaver Crk-Skunk Crk.	11H14	7150	1/29	45	10.8	6.2	8.0*
Ben Lomond(lower)	11H9	5850	2/1	33	11.9	11.4	10.7*
Ben Lomond Peak	11H8	8000	2/1	94	33.5	19.5	22.0*
Ben Lomond Trail	11H30	6000	2/1	39	13.8	11.9	- -
Cutler Creek	11H29	6780	2/1	70	26.2	16.6	- -
Dry Bread Pond	11H13	8230	1/29	60	15.7	8.7	11.3*
Monte Cristo R.S.	11H12	8960	2/4	72	25.0	11.5	16.0*
Sagebrush Flat	11H15	6300	1/29	18	3.9	5.4	4.2*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1948-62, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
NAME	NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	AVERAGE ^a
WEBER RIVER							
Beaver Creek R.S.	11J24	7500	1/29	38	10.3	3.7	6.2*
Chalk Creek #2	11J2	8000	1/28	50	15.1	6.2	8.5*
Chalk Creek #3	11J3	7500	1/28	31	8.4	4.3	4.7*
Farmington Canyon(lower)	11J12	6950	Delayed Report			12.1	15.0*
Farmington Canyon(upper)	11J11	8000	Delayed Report			13.1	16.8*
Lamb's Canyon x	11J14	6600	1/28	59	15.6	7.0	9.5*
Parley's Canyon Smt.	11J15	7500	1/30	64	21.4	10.2	11.6*
Silver Lake x	11J16	8725	1/29	76	26.5	12.0	16.0
Smith & Morehouse	11J4	7600	1/27	44	13.3	5.5	7.8*
Trial Lake x	10J8	9800	1/29	92	28.4	10.4	16.5*

PROVO RIVER & UTAH LAKE

Camp Altamont	11J20	7300	1/29	48	15.4	7.2	11.9
Clear Creek Ridge #2	11K22	8000	1/27	53	14.4	6.3	8.9*
Clear Creek Ridge #3	11K23	6600	1/27	32	8.9	3.3	5.2*
Daniels-Strawberry Smt.	11J23	8000	1/28	46	13.2	5.1	10.1
East Portal	11J7	7560	1/29	39	11.4	3.8	8.1
Payson R.S.	11K1	8050	1/28	46	14.8	7.8	10.5*
Rock Bridge	11K2	6750	1/28	38	10.9	6.8	7.8*
Soapstone R.S.	11J25	7800	1/29	63	16.6	4.8	8.0*
South Fork R.S.	11J19	6100	1/28	24	5.5	5.4	5.9
Strawberry Divide	11J8	8000	1/29	61	18.8	8.2	13.3
Timpanogos Cave Camp	11J18	5500	1/28	16	3.3	3.9	2.8
Timpanogos Divide	11J21	8140	1/29	67	24.1	12.8	17.6
Trial Lake	10J8	9800	1/29	92	28.4	10.4	16.5*

JORDAN RIVER & TOOELE VALLEY

Lamb's Canyon	11J14	6600	1/28	59	15.6	7.0	9.5*
Middle Canyon	12J3	7000	1/29	35	11.4	8.3	8.5*
Mill D South Fork	11J10	7400	1/29	75	21.1	9.7	12.0*
Parley's Canyon Smt. x	11J15	7500	1/30	64	21.4	10.2	11.6*
Silver Lake	11J16	8725	1/29	76	26.5	12.0	16.0

UPPER SEVIER RIVER

(South of Richfield, Utah)

Big Flat x	12L7	10290	1/27	44	13.1	5.0	10.6*
Bryce Canyon	12M8	8000	1/30	17	3.1	1.0	3.8*
Duck Creek R.S.	12M4	8560	1/27	34	10.0	3.0	9.0*
Harris Flat R.S.	12M5	7700	1/27	23	6.2	2.2	5.7*
Long Valley Junction x	12M6	7500	1/27	11	2.6	1.4	3.2*
Midway Valley	12M2	9800	1/29	44	13.1	8.3	12.5*
Widtsoe-Escalante Smt.	11M1	9500	1/29	17	4.4	2.9	5.1
Widtsoe-Escalante #2	11M2	9500	1/29	23	4.7	3.8	6.8*
Widtsoe-Escalante #3	11M3	9500	1/29	24	5.2	4.2	9.3*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation; Water content estimated. * Estimated 1948-62, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

LOWER SEVIER RIVER
(Including San Pitch River)

Farnsworth Lake	11L1	9900	1/28	51	15.4	7.9	9.5*
G.B.R.C. Headquarters	11K11	8700	1/29	49	14.5	6.3	9.0*
G.B.R.C. Meadows	11K10	10000	1/29	66	22.4	9.3	14.5*
Gooseberry R.S.	11L2	8400	1/28	35	10.0	6.2	5.9*
Gooseberry Reservoir x	11K4	8700	1/27	54	15.9	7.8	11.8*
Mammoth R.S.-Ctnwd.Crk.	11K3	8800	1/27	61	16.6	8.0	12.2*
Shingle Mill	12L11	6200	1/26	20	5.0	4.9	- -

BEAVER RIVER

Big Flat	12L7	10290	1/27	44	13.1	5.0	10.6*
Merchant's Valley	12L9	8200	1/27	26	6.9	1.6	5.8*
Otter Lake	12L8	9300	1/27	38	10.0	4.7	8.7*

COAL CREEK

Midway Valley x	12M2	9800	1/29	44	13.1	8.3	12.5*
Urie Flat	12M10	8450	1/29	19	5.1	2.3	4.7*
Webster Flat	12M3	9200	1/29	32	8.5	4.6	9.8*

COLORADO RIVER DRAINAGE

UPPER GREEN RIVER IN UTAH
(Tributaries above Flaming Gorge)

Buck Pasture A	10J23	9700	2/3	75	21.0A	8.0	- -
Henry's Fork A	10J24	10200	2/3	39	11.0A	8.0	- -
Steel Creek Park A	10J20	9900	2/3	63	17.5A	- -	- -

DUCHESNE RIVER

Ashley Twin Lakes A	9J11	10500	2/3	48	13.5A	5.4	- -
Atwood Basin A	10J27	10250	Delayed Report			7.2	- -
Chepeta-Whiterocks Lks A	9J9	10300	Delayed Report			5.8	- -
Daniels-Strawberry Smt.x	11J23	8000	1/28	46	13.2	5.1	10.1
East Portal x	11J7	7560	1/29	39	11.4	3.8	8.1
Five Point Lake A	10J26	11000	Delayed Report			7.7	- -
Indian Canyon =	10K1	9100	1/29	46	13.7	2.7	8.2
Julius Park	9J6	9800	1/29	38	10.3	4.2	8.9*
Lakefork Basin A	10J25	11100	Delayed Report			8.0	- -
Lakefork Mountain	10J10	10500	1/28	41	11.2	5.2	7.3*
Lakefork Mountain #2	10J11	8900	1/28	33	8.7	1.9	5.2*
Lakefork Mountain #3	10J12	8100	1/28	28	7.3	1.3	4.2*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1948-62, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

DUCHESNE RIVER - Continued

Mosby Mountain	9J5	9500	1/29	35	9.2	2.1	6.8*
Paradise Park	9J3	10100	1/29	36	10.1	2.8	8.4*
Reynolds Park A	9J10	10400	Delayed Report			-	-
Soapstone R.S. x	11J25	7800	1/29	63	16.6	4.8	8.0*
Strawberry Divide	11J8	8000	1/29	61	18.8	8.2	13.3
Trial Lake	10J8	9800	1/29	92	28.4	10.4	16.5*
Windy Park A	9J12	9400	2/3	26	7.3	3.8	-

PRICE RIVER

Dry Valley Divide	11K8	7800	1/29	40	11.7	2.4	7.0*
Gooseberry Reservoir	11K4	8700	1/27	54	15.9	7.8	11.8*
Indian Canyon x	10K1	9100	1/29	46	13.7	2.7	8.2
Jones Ranch	11K7	7600	1/29	27	8.0	1.2	5.1*
Mammoth R.S.-Ctnwd.Crk.x	11K3	8800	1/27	61	16.6	8.0	12.2*
Mud Creek #2	11K33	8300	1/29	53	14.9	3.7	8.1*

SAN RAFAEL RIVER

Buck Flat	11K31	9400	1/26	59	16.6	4.5	8.4*
Gooseberry Reservoir	11K4	8700	1/27	54	15.9	7.8	11.8*
Mammoth R.S.-Ctnwd Crk.x	11K3	8800	1/27	61	16.6	8.0	12.2*
Red Pine Ridge	11K28	9400	1/27	62	18.7	5.7	9.8*
Rush Pond	11K38	9800	1/26	56	14.9	3.6	7.8*
Upper Joe's Valley	11K29	8800	1/27	48	12.8	1.8	5.3*
Wrigley Creek	11K32	9000	1/26	46	11.1	2.3	5.8*

FREMONT RIVER

Farnsworth Lake x	11L1	9900	1/28	51	15.4	7.9	9.5*
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ESCALANTE RIVER

Widtsoe-Escalante Smt.	11M1	9500	1/29	17	4.4	2.9	5.1
Widtsoe-Escalante #2	11M2	9500	1/29	23	4.7	3.8	6.8*
Widtsoe-Escalante #3	11M3	9500	1/29	24	5.2	4.2	9.3*

VIRGIN RIVER

Duck Creek R.S.	12M4	8560	1/27	34	10.0	3.0	9.0*
Harris Flat R.S.	12M5	7700	1/27	23	6.2	2.2	5.7*
Long Valley Junction	12M6	7500	1/27	11	2.6	1.4	3.2*
Midway Valley x	12M2	9800	1/29	44	13.1	8.3	12.5*
Webster Flat	12M3	9200	1/29	32	8.5	4.6	9.8*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1948-62, 15 year average.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

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GREAT BASIN DRAINAGE

UPPER BEAR RIVER (Above Harer, Idaho)

Chalk Creek #2*	8000	1/28	- -	- -	14.80	10.65	139
Chalk Creek #3*	7500	1/28	- -	- -	12.59	- -	- -
Monte Cristo #2	8960	Delayed Report		- -		18.10	
Salt River Summit	7900	1/28	3.80	3.65	17.85	11.40	156
Trial Lake*	9800	1/29	4.25	4.50	23.59	15.55	152

LOWER BEAR RIVER (Below Harer, Idaho)

Dry Bread Pond	8230	1/29	4.89	- -	21.17	13.95	152
Garden City Summit	7600	2/2	5.51	2.90	23.82	11.15	214
Klondike Narrows	7400	2/2	9.44	4.80	36.87	15.00	246
Monte Cristo #2	8960	Delayed Report		- -		18.10	
Tony Grove R.S.	6250	2/2	7.69	- -	23.43	- -	- -
Willow Flat	6100			- -		15.40	

OGDEN RIVER

Ben Lomond(lower)	5850	2/1	7.63	5.70	26.84	16.30	165
Ben Lomond Trail	6000	2/1	7.81	5.92	27.38	17.05	160
Causey Dam	5500	1/29	2.58	- -	13.68	- -	- -
Dry Bread Pond	8230	1/29	4.89	- -	21.17	13.95	152
Monte Cristo #2*	8960	Delayed Report		- -		18.10	
Sagebrush Flat	6300	1/29	2.74	- -	15.34	9.35	164

WEBER RIVER

Chalk Creek #2	8000	1/28	- -	- -	14.80	10.65	139
Chalk Creek #3	7500	1/28	- -	- -	12.59	- -	- -
Farmington Guard Sta.(1)	7500	Delayed Report		5.60a		19.00a	
Farmington Rice (1)	7000	Delayed Report		5.13a		17.12a	
Parley's Canyon Smt.	7500	1/30	7.28	4.05	23.60	13.50	175
Silver Lake(Brighton)*(2)	8725	1/31	5.98	5.39a	27.00	18.37a	147
Smith & Morehouse	7600	1/27	2.60	3.60	16.34	11.90	137
Trial Lake*	9800	1/29	4.25	4.50	23.59	15.55	152

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. *Adjacent drainage.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

PROVO RIVER & UTAH LAKE

Clear Creek Ridge #2	8000	1/27	- -	- -	14.61	11.00	133
Daniels-Strawberry Smt.	8000	1/28	3.00	3.50	16.72	11.85	141
East Portal Ridge	7800	1/29	2.96	- -	15.96	- -	- -
Payson R.S.	8050	1/28	2.85	3.50	15.17	11.65	130
Soapstone R.S.	7800	1/29	4.07	3.15	16.81	10.50	160
Strawberry Res.-E.Portal	7606	1/29	0.80	2.24a	9.30	7.22a	129
Timpanogos Divide	8200	1/29	4.58	5.53a	21.43	17.26a	124
Trial Lake	9800	1/29	4.25	4.50	23.59	15.55	152

JORDAN RIVER & TOOELE VALLEY

Middle Canyon	7000	1/29	2.94	3.10	15.78	11.30	140
Mt. Dell Dam(2)	5500	1/31	4.49	2.15a	17.01	8.26a	206
Parley's Canyon Smt.	7500	1/30	7.28	4.05	23.60	13.50	175
Silver Lake(Brighton)(2)	8725	1/31	5.98	5.67a	27.00	18.37a	147

SEVIER RIVER ABOVE RICHFIELD

Big Flat	10290	1/27	- -	- -	11.76	11.20	105
Duck Creek R.S.	8560	1/27	2.60	3.70	10.48	10.60	99
Webster Flat*	9200	1/29	2.59	5.00	10.47	12.00	87
Widtsoe-Escalante #3	9500	1/29	1.86	1.95	6.42	8.20	78
Widtsoe R.S.	7600	1/29	0.58	0.75a	1.87	3.46a	54

SEVIER RIVER BELOW RICHFIELD (Including San Pitch River)

Farnsworth Lake	9900	1/28	3.35	3.15	15.30	11.15	137
G.B.R.C. Headquarters(1)	8700	1/29	2.55	3.40a	14.93	11.16a	134
G.B.R.C. Meadows(1)	10000	1/29	3.29	3.56a	17.46	12.31a	142
G.B.R.C. Oaks(1)	7655	1/29	1.70	2.14a	10.09	7.73a	130
Gooseberry R.S. (1)	7800	1/28	2.18	1.85	11.07	7.65	145
Gooseberry Reservoir*	8700	1/27	3.05	3.60	15.83	11.75	135
Mammoth R.S. #2*	8600	1/27	3.45	3.55	16.78	11.65	144
Shingle Mill	6200	1/26	2.25	2.55	10.25	9.05	113

BEAVER RIVER

Beaver Canyon P.H. (2)	7275	1/31	0.69	2.07a	4.87	5.87a	83
Big Flat	10290	1/27	- -	- -	11.76	11.20	105

COAL CREEK

Webster Flat*	9200	1/29	2.59	5.00	10.47	12.00	87
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PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

COLORADO RIVER DRAINAGE

UPPER GREEN RIVER IN UTAH (Tributaries above Flaming Gorge)

Burnt Creek	7900	1/29	0.67	- -	6.34	- -	- -
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GREEN RIVER TRIBUTARIES BETWEEN FLAMING GORGE & DUCHESNE RIVER

Grizzly Ridge	8500	1/29	1.00	- -	8.28	- -	- -
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DUCHESNE RIVER

Daniels-Strawberry Smt.*	8000	1/28	3.00	3.50	16.72	11.85	141
East Portal Ridge*	7800	1/29	2.96	- -	15.96	- -	- -
Indian Canyon	9100	1/29	2.52	3.35	12.84	10.15	126
Julius Park	9800	1/29	1.07	2.40	9.53	9.45	101
Lakefork Mountain	10500	1/28	- -	- -	11.77	9.15	129
Moon Lake	8150	1/30	0.30	1.67a	7.40	5.92a	125
Mosby Mountain	9500	1/29	1.31	- -	9.43	- -	- -
Paradise Park	10100	1/29	0.80	2.60	9.95	10.15	98
Soapstone R.S.*	7800	1/29	4.07	3.15	16.81	10.50	160
Strawberry Res.-E. Portal*	7606	1/29	0.80	2.24a	9.30	7.22a	129
Trial Lake*	9800	1/29	4.25	4.50	23.59	15.55	152

PRICE RIVER

Clear Creek Ridge #2*	8000	1/27	- -	- -	14.61	11.00	133
Gooseberry Reservoir	8700	1/27	3.05	3.60	15.83	11.75	135
Indian Canyon	9100	1/29	2.52	3.35	12.84	10.15	126
Mammoth R.S.#2	8600	1/27	3.45	3.55	16.78	11.65	144
Mud Creek	8300	1/29	2.40	3.15	15.20	10.30	147

SAN RAFAEL RIVER

Buck Flat	9400	1/28	- -	- -	16.55	10.15	163
G.B.R.C. Meadows*(1)	10000	1/29	3.29	3.56a	17.46	12.31a	142
Gooseberry Reservoir	8700	1/27	3.05	3.60	15.83	11.75	135
Red Pine Ridge	9400	1/27	- -	- -	18.90	12.10	156

FREMONT & ESCALANTE RIVERS

Farnsworth Lake*	9900	1/28	3.35	3.15	15.30	11.15	137
Widtsoe-Escalante #3	9500	1/29	1.86	1.95	6.42	8.20	78

VIRGIN RIVER

Duck Creek R.S.	8560	1/27	2.60	3.70	10.48	10.60	99
Webster Flat	9200	1/29	2.59	5.00	10.47	12.00	87

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. *Adjacent drainage.

Agencies Cooperating in Utah Snow Surveys

U. S. GOVERNMENT AGENCIES

U. S. Department of Agriculture
Soil Conservation Service
Forest Service
U. S. Department of Commerce
Weather Bureau
U. S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service

STATE AGENCIES

Utah Agricultural Experiment Station
Utah Fish and Game Department
Utah State Engineer
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner
Utah Water and Power Board

MUNICIPALITIES

Manti
Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

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with the Snow Survey"*